



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

February 10, 2014

Gregory Preston
Department of the Navy
Director, BRAC Program Management Office East
Attn: Willow Grove EIS
4911 South Broad Street, Building 679
Philadelphia, PA 19112-1303

Re: Draft Environmental Impact Statement for the Disposal and Reuse of the Former Naval Air Station Joint Reserve Base Willow Grove, Horsham, Pennsylvania (CEQ #20130375)

Dear Mr. Preston:

In accordance with the National Environmental Policy Act (NEPA) of 1969, Section 309 of the Clean Air Act and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508), the U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement (DEIS) for the Disposal and Reuse of the Former Naval Air Station Joint Reserve Base (NAS JRB) Willow Grove in Horsham, Pennsylvania.

The NAS JRB consists of 909 acres. Three acres will be transferred to the Federal Aviation Administration and 45 acres to the United States Air Force, Horsham Air Guard Station. Following the federal transfers, the remaining 861 acres of installation property was declared surplus and is available for reuse.

The purpose of the proposed action is the disposal of the NAS JRB Willow Grove from federal ownership and its subsequent reuse by the Local Redevelopment Authority (LRA) in a manner consistent with the Redevelopment Plan. The proposed action is needed to provide the local community an opportunity for economic development and job creation. The disposal of the property is the responsibility of the Department of Navy (DON), and the LRA is responsible for the implementation of the Redevelopment Plan. The future developer or owner of the property would be responsible for implementation of mitigation measures and project environmental controls identified for resource impacts associated with reuse.

The DEIS evaluates three action alternatives for reuse of the surplus property and the No Action Alternative. Alternative 1, the Preferred Reuse Alternative, is use of the surplus property

consistent with the Redevelopment Plan, as adopted by the Horsham LRA (HLRA). Alternative 2 is redevelopment of the property with a more dense mixture of land uses. Alternative 3 is redevelopment of the property as an airfield. The No Action Alternative is the retention of NAS JRB Willow Grove by the federal government in caretaker status. Under this scenario, no reuse or redevelopment of the property would occur.

As a result of our review of the DEIS, EPA has concerns with impacts to human health and the environment due to on-site contamination and on-going remedial activities as well as environmental justice, transportation and cumulative impacts. A detailed description of these concerns is presented in the Technical Comments (enclosed) for your consideration. EPA rated the DEIS an EC-2 (Environmental Concerns/Insufficient Information), which indicates that we have environmental concerns regarding the proposal and that there is insufficient information in the document to fully assess the environmental impacts of this project. A copy of EPA's rating system is enclosed for your information.

Thank you for the opportunity to review this project. EPA would like to extend an opportunity to meet to discuss our concerns with the proposed reuse of the former installation. If you are interested in meeting or have questions regarding these comments, the staff contact for this project is Karen DelGrosso; she can be reached at 215-814-2765.

Sincerely,



Barbara Rudnick
NEPA Team Leader
Office of Environmental Programs

Enclosures (2)

Technical Comments

Preferred Alternative, Alternative 1

Page 4-5 states, "Full build-out of Alternative 1 would allow for a maximum of 1,486 residential units, 2,337,349 square feet of non-residential floor space, and approximately 240 acres of open space, and natural areas. The total build-out projection includes the reuse of six existing non-residential structures, comprising approximately 91,621 square feet of useable space. The remaining development would be comprised of new residential and non-residential construction. The build-out assumes full occupancy of all structures (over a 20-year period)." Please discuss the six existing non-residential structures to be reused. These buildings should be identified and depicted on a map. Include the historical use of these buildings and what they will be used for as well as any potential environmental impacts related to these structures.

ENVIRONMENTAL MANAGEMENT

Hazardous Waste

Page 3-41 states, "The former NAS JRB Willow Grove property was classified by the PADEP as a Large Quantity Generator (No. PA4170000158)." The DEIS states, "Hazardous waste generated at the former NAS JRB Willow Grove property was generated by aircraft, ground vehicles, and facility maintenance, and included solvents, waste paints, adhesives, sealants, contaminated fuel, rags, and various acids." In addition, "Hazardous waste generated at the former NAS JRB Willow Grove property was accumulated in Building 633 for less than 90 days prior to contractor collection for off-site treatments, recycling, and disposal (Navy 2006)." The DEIS states that, "Hazardous wastes have been removed from Building 633 and RCRA wastes are no longer generated at the installation." Has or will Building 633 be tested for residual contamination before disposal?

Radon

Page 3-47 states, "Several radon surveys have been conducted at the former NAS JRB Willow Grove property. Surveys conducted in 1991 were limited to Quarters E in Building 113 and Building 601. The sample collected from Quarters E in Building 113 contained radon at a concentration of 6.9 pCi/L, which is above the EPA action level. Three radon detectors were installed in 1999 as a result of the radon samples collected in 1991. Quarters E in Building 113 was screened twice more in 1999 and 2001; however, the radon concentrations were below the EPA action level (Navy 2006)." Please provide an explanation as to why the radon concentration results were below the EPA action level. Was a mitigation system installed? If not, were proper testing instructions followed or ignored which would skew test results.

Page 3-47 states, "In 1999, radon concentrations in buildings 601 were identified as being above the EPA action level; however, no abatement was conducted (Navy 2006)." Please explain why mitigation was not conducted.

Although EPA appreciates that Buildings 113, 137 and 601 were not recommended for reuse under Alternative 1 and would be demolished, EPA questions why actions to mitigate were not taken as well as the method of sampling when attempted as well as validity of results.

Page 4-72 states, "Any available and relevant radon assessment data pertaining to the former NAS JRB Willow Grove property will be included in property transfer documents, in accordance with DOD policy (DOD 1994). However, DOD policy is not to perform radon assessment and mitigation prior to transfer of BRAC property unless otherwise required by applicable law (DOD 1994, 2006)." The Navy will recommend to the developer to conduct radon screenings in any building retained for reuse or constructed in place of Buildings 113, 137, and 601 (areas of radon detection). EPA appreciates the Navy's recommendation to the developer to ensure future safety within buildings.

Aboveground Storage Tanks

Page 3-42, Section 3.5.3.2, Aboveground Storage Tanks (AST), and Table 3.5-1: It is important to note that several ASTs were used or contained Aqueous Film-Forming Foam (AFFF). AFFF contains emerging contaminants known as PFOSs and PFOAs. These ASTs have not yet been evaluated at Buildings 80, 177, 183, 650 and 681. Before the ASTs can be closed, they must be evaluated.

Pesticides/Herbicides

Page 3-48 states, "Records relating to the actual use, spills, or misuse of pesticides and herbicides at NAS JRB Willow Grove are not available (RKG 2012). However, there is a potential for residual concentrations of pesticides and herbicides from past use."

As stated on page 3-48, "The Redevelopment Plan suggests that additional soil sampling for arsenic may be needed because elevated arsenic concentrations could limit land use, especially in areas with a high risk of ingestion exposure, such as parks and children's play areas (RKG 2012); however, if needed, this would be completed following transfer of the former installation property out of federal government ownership."

Page 3-48, Section 3.5.3.8, Pesticides/Herbicides, mentions that pesticide contamination from past disposal activities is present at IRP Site 3 – Ninth Street Landfill and Site 12 – South Landfill. "Remediation at these two sites is ongoing." This is not true statement. The RI/FS Investigation for both sites is ongoing but a Feasibility Study has not been completed and a remedy has not been selected yet.

Is it not the Navy's responsibility to sample for contaminants prior to transfer? Please confirm who would be responsible for performing additional soil sampling and who would be responsible for cleanup (if needed) once transfer has taken place.

Page 4-72 states, "The presence of arsenic at the installation, which is a contaminant of concern in Pennsylvania, could impact land use under Alternative 1." Have all of the soils been tested for arsenic at the installation? Was arsenic tested at only the IRP sites?

Radioactive Materials Sites

Page 3-49 states, "According to the HRA (historical radiological assessment), radioactive materials were used, stored, and disposed of within the Main Station at the former NAS JRB Willow Grove property. A total of 18 sites are considered impacted from these activities. The HRA has not determined whether radioactive contamination is actually present at these sites; therefore, further investigations are recommended."

The HRA concluded that "low to moderate potential for radioactive contamination" exists at the 18 impacted sites." Page 4-72 states, "Based on the preliminary information for the "potential" for contamination recorded in the HRA, it appears that under Alternative 1, most of the sites with a "likely" or "unknown" potential for contamination occur in areas designed as open space/park/golf course, hotel/conference center/office center, and town center. However, Buildings 80 and 680 are located within areas designed as single-family housing and school space." Page 4-72 notes that the 18 impacted sites have been recommended for a scoping study to determine whether residual radioactive contamination is present. Although an impacted site may be remediated and released as free from residual contamination, the site is not generally reclassified as non-impacted."

EPA is concerned that since a full investigation of these sites has not yet been conducted and preliminary information has been used for site planning to include housing and schools designated for areas with low to moderate potential for radioactive contamination that there is a risk to human health. As noted in the comment for the Protection of Children, it is children that have the greatest risk factor for exposure to contaminants. It would seem that a completion of scoping surveys and remediation would be in order prior to designation of reuse. Without this information, it does not seem prudent to build family housing and a school within these areas.

Page 3-49: The 18 Impacted Sites identified by the HRA need to be depicted on all of the Action Alternatives figures.

Figures 2-1, 2-2, and 2-3 (maps of action alternatives 1, 2 and 3) should include an overlay of all the Installation Restoration Program (IRP) Sites and Historical Radiological Assessment (HRA) Sites (Potential Impacted Sites/Buildings for Radiological Assessments). This would help in the risk evaluation for each of the impacted sites and IRP sites related to the future reuse. Active remediation sites such as IRP Site #5 (Fire training area) should also be included.

Alternative 1 and 2, have reuse areas designated for a school. In that same parcel are three potential radiological impacted sites. It cannot be assumed that the radiological impacts sites are clean until the assessments are completed.

Section 3.5.1: Add a section that describes the Historical Radiological Assessment process and the assessment of the impacted sites/buildings (part of Navy's program).

Any of the areas identified for future residential reuse must be evaluated for human health risk.

Figure 3.5-2, IRP Sites: The IRP sites need to be labeled with a greater contrast so they can be seen in relation to the aerial photograph background.

Environmental Restoration Program

As noted in Table 3.5-6, Current Status of IRP Sites, Site No. 1, the Privet Road Compound, is still under investigation for off-site contamination of groundwater, even though the 2008 interim ROD selected land use controls. The site is located on the property to be transferred to the Horsham Air Guard Station. However, because the investigation is still underway for off-site contamination of groundwater, please discuss the potential impacts/risks to the adjacent housing development planned under the Preferred Alternative. Can the results of the investigation affect proposed reuse of nearby areas?

Table 3.5-6 indicates that Site No. 3, Ninth Street Landfill, is in the process of an RI/FS. Please discuss how the results of the RI/FS could impact reuse. It appears as if Site No. 3, under the Preferred Alternative, is to be designated as a park. It is suggested that the Navy recommend precautions for park users and possible signage to disclose the history/previous use of land.

Table 3.5-6 indicates that Site No. 12, South Landfill, is in the process of an RI/FS. Page 4-74 states, "Remedial activities at the landfills at Sites 3 and 12 are on-going and there will be land use constraints from future development." The reuse proposed under the Preferred Alternative, is the proposed Town Center, park, and office park. Please discuss if the results of the RI/FS could possibly alter reuse planned and if future users will be made aware of historical contamination of the site and/or the type of mitigation/land use constraints necessary for development.

Page 4-77, Integration of Constraints with Reuse Alternatives, mentions planning concepts incorporated into the Preferred Alternative to minimize the impacts of IRP sites on human health and the environment. One constraint is to minimize residential development in areas with known environmental contamination. Should any residential development be planned in areas of known environmental contamination, especially if some sites are still under investigation and/or remediation? Will disclosure of contamination be made known to potential homeowners? Another constraint is to minimize the number of structures in areas with known VOC contamination to maintain indoor air quality and reduce risks to human health. Again, will there be disclosure of contaminants to users of the buildings, etc.? Will there be periodic monitoring of buildings to ensure indoor air quality is safe for users? According to page 6-4, "No long-term monitoring has been found to be applicable for the alternatives presented in this EIS." Should there be at a minimum, a follow-up test to ensure quality of the indoor air is safe after abatement is complete?

It is also mentioned on page 4-77 that, "Development of the transportation system, including pedestrian trails, could impact the IRP sites." Public awareness should be an important component in the redevelopment plan. EPA suggests signage along trails, etc. to promote public awareness.

PCBs

Page 4-71 states, "As discussed in Section 3.5.3.6, all PCB-containing transformers and equipment formerly located at the installation were reportedly removed in the late 1990s (Navy 2006); however, no record of these removals is available. PCB soil contamination was addressed at IRP Site 1 – Privet Road (refer to Section 3.5.3.6)." If there are no records of all PCB-containing transformers and equipment removed, how can the Navy be certain that the equipment was removed? Is there a plan to evaluate the properties to ensure that all PCB-containing transformers and equipment are no longer located at the installation? Have soils been screened for PCB contamination?

Soils

Page 4-131 states, "Alternative 1 would include approximately 220 acres of residential land use, 260 acres of commercial land use, and 310 acres of other land uses including open space and recreation.

The DEIS does not adequately address the condition of the soils on the installation considering the history of contamination on the site. Even for those sites with known contamination, it is not clear as to the treatment of the soil. For instance, Page 4-72 states, "The presence of arsenic at the installation, which is a contaminant of concern in Pennsylvania, could impact land use under Alternative 1. The concentrations of arsenic detected in most soil samples collected in IRP Site 7 in 2008 exceeded the risk-based concentration but were within background levels for soil (Tetra Tech 2012b)." Reuse for Site 7 under the Preferred Alternative consists of both a park and single family housing. Will the arsenic be removed as the potential for contact is possible considering reuse of a park and housing are proposed where people will be exposed? Please explain. Please discuss if soils have been tested for arsenic and where. Was arsenic tested only at the IRP sites?

Prime Farmland

Page 3-45 states, "Approximately 234 acres of the former installation property have prime farmland soils or farmland of statewide importance." In addition, "While prime farmland soils and farmland of statewide importance on the property have the potential to be farmed, the surrounding uses are not particularly compatible with such activity." Prime farmland impacted by the Proposed Action should be delineated regardless of the current state of cultivation. These efforts should be coordinated with the Soil Conservation Service. Impacts to prime farmland should be avoided. However, if this is not possible, the EIS should explain the implications of developing the prime agricultural land with respect to the Farmland Protection Policy Act as well as describe the mitigation measures for those impacts. Although it may have been understandable that the prime farmland would not have been used by the former installation

when operable, the HLRA could address prime farmland soils and incorporate it into its plans. Please discuss.

Page 4-7 states, "Full build-out (of Alternative 1) could have the beneficial indirect effect of preserving natural open spaces and agricultural areas from being developed as further demands for housing and commercial space could be met by redevelopment of the installation. Please quantify the agricultural areas to be preserved from development.

Stormwater

Page 3-81 and 3-82 state, "In 2001, NAS JRB Willow Grove applied for and received an NPDES permit from U.S. EPA Region 3 for stormwater that drains into Little Neshaminy Creek, Pennypack Creek, and Park Creek through the Commonwealth National County Club. The NPDES permit (No. PA 0022411) had a term of 5 years and expired on 7 December 2006 (Navy 2006)." Why was the permit left to expire in 2006 when closure of the installation occurred in 2011? Please explain.

Page 4-114 states, "Under Alternative 1, impervious surface areas would cover approximately 352 acres of 41 percent of the total 861 acres of the property." In addition, "The projected 352 acres of impervious surface area would be an increase of 103 acres (or 12 percent) over the existing impervious surface." Section 6, Best Management Practices, Mitigation, and Monitoring, references excellent stormwater control practices through low impact development (LID). There are additional practices, however, not mentioned that will help to promote water infiltration (i.e., incorporating pavers in place of asphalt, green parking design, etc.). For more detailed information, please refer to the following web site:
http://www.epa.gov/oaintmnt/stormwater/best_practices.htm.

Wetlands

Page 4-139 states, "Redevelopment under Alternative 1 would have the potential to directly impact 13 wetlands encompassing approximately 7.0 acres."

As noted on pages 3-108 and 3-109, the wetland assessment involved a desktop analysis of baseline wetland information and on-site survey. "The USACE did not make a jurisdictional determination confirming the wetland boundaries, as they are being used for planning-level analysis specific to this study." However, "Based on the results of the desktop analysis, specific areas of the former installation property were targeted for field verification and delineation from April 1 through April 6, April 30 through May 3, and May 12, 2013." As a result of the field surveys, a total of 23 wetlands, totaling 25.96 acres were identified. Since the field study looked at sample sites and a jurisdictional determination confirming the wetland boundaries was not conducted, can it be assumed then that the size of the wetland areas may differ from that which is presented in the DEIS? Is there a potential to have an even greater wetland impact? Please explain. EPA understands (as noted in Appendix F) that "A jurisdictional determination will need to be conducted by a developer prior to any redevelopment of the installation property." Why did the Navy decide not to request that the USACE make a jurisdictional determination to confirm the wetland boundaries? This is pertinent information in the transfer process and in

preservation of wetlands during the planning for redevelopment? Impacts to wetland should be avoided or minimized whenever possible.

Page 4-139 states, "The use of pesticides and fertilizers on the golf course could also result in indirect impacts on the wetland complex. However, it is expected the developer would implement an integrated pest management plan and/or a nutrient management plan to mitigate potential impacts from pesticides and fertilizer used on the golf course. In addition, the developer should consider a LID golf course, which would emphasize the conservation of natural landscape features, including wetlands, and thereby mitigate potential environmental impacts." In addition, it is suggested that buffers should be required around wetlands. It is recommended that the Navy includes these recommendations in the property transfer documentation. There is no mention of these suggestions in Section 6, Best Management Practices, Mitigation, and Monitoring.

Page 4-140 states, "Specific mitigation requirements for future development projects at the former installation would be determined in coordination with the USACE and PADEP." Coordination should also include EPA. In addition, EPA questions that if USACE conducted a jurisdictional determination of wetlands prior to transfer, then wetland avoidance, minimization and mitigation could have been incorporated into the site planning.

Vegetation/Threatened and Endangered Species

Page 4-159 states, "Under Alternative 1, proposed construction could result in the long-term loss or alteration of approximately 68 acres (54 percent) of currently undeveloped land at the former installation (Table 4.12-1)." Of the 68 acres, 44.24 acres consist of deciduous forest, 10.13 acres of pasture/hay, 5.53 acres of emergent herbaceous wetland, 4.36 acres of grassland/herbaceous/ and 2.09 acres of shrub/scrub. It is understood that mitigation for wetland loss will be coordinated with the USACE and PADEP. The redevelopment plan should have addressed mitigation for other vegetative loss, especially for loss of forest.

As previously stated on page 3-122, "the PFBC indicated that a species of concern is known from the vicinity of the former installation. Unfortunately, the species of concern was not identified. It is imperative to know which species is of concern to determine the full impact of vegetation loss and whether areas of impact can or should be avoided or minimized. Has there been any further attempt to communicate with the Pennsylvania Fish and Boat Commission to identify the species of concern? It is recommended that the Navy work with the PFBC to avoid and minimize impacts to species of concern.

Protection of Children from Environmental Risks and Safety Risks

The DEIS did not adequately address the environmental risks to children who may live and play on the former installation. Page 4-24 states, "When the percentage of the population that is either minority/low-income or under the age of 18 years within an affected area exceeds 50 percent or is "meaningfully greater" than the minority or low-income population percentage of the community of comparison, that population could potentially experience a disproportionately high and adverse effect." It is important to note that Executive Order 13045,

“Protection of Children from Environmental Health Risks and Safety Risks,” requires each federal agency to make it a high priority to identify and assess environmental health and safety risks to children that may disproportionately affect children to ensure that policies, programs, activities, and standards address disproportionate risk to children that result from environmental health or safety risks. Children are disproportionately more susceptible to environmental factors encountered on the former installation than adults. With the reuse plan proposed, more children will be directly exposed to environmental conditions on the former installation as a result of housing, school, and recreational activities planned.

More specifically, the Executive Order recognizes that some physiological and behavioral traits of children render them more susceptible and vulnerable than adults to environmental health and safety risks. Children may have a higher exposure level to contaminants because they generally eat more food, drink more water, and have higher inhalation rates relative to their size. Children also exhibit behaviors such as spending extensive amounts of time in contact with the ground and frequently putting their hands and objects in their mouths that can also lead to much higher exposure levels to environmental contaminants. In addition, a child’s neurological, immunological, digestive, and other bodily systems are also potentially more susceptible to exposure related health effects. It has been well established that lower levels of exposure can have a negative toxicological effect in children as compared to adults, and childhood exposures to contaminants can have long-term negative health effects. Examples include life-long neurological deficits resulting from exposure to lead, mercury and other metals, and the increased susceptibility to particulate matter and other asthma triggers in the environment.

It is well documented that children are more susceptible to many environmental factors than adults, including exposure to mobile source air pollution, particulate matter from construction or diesel emissions and lead and other heavy metals present in construction and demolition debris or mining waste. It is recommended that an analysis of potential impacts to children be included in the FEIS if disproportionate impacts on children caused by the proposed action are reasonably foreseeable. Childhood exposures at each life stage, including those experienced via pregnant and nursing women, are relevant and should be considered when addressing health and safety risks for children.

The DEIS did not discuss potential risks to children based on known contamination on-site and potential exposure based on reuse of the site. It is recommended that the environmental document provide an assessment of potential exposures and susceptibilities to pollutants of concern for children.

As page 4-36 states, “Alternative 1 calls for the transfer of approximately 40 acres to the Hatboro-Horsham School District, which would construct a new middle school at the site, along with administrative and recreational facilities.” In addition, Alternative 1 would add approximately 270 acres of new recreation and open space land where children may be exposed. It is imperative that reuse of the land is safe for children. Please discuss environmental impacts of the former installation’s contamination and its potential impact on children, especially on sites designated for the new school, housing and recreational areas.

Cultural Resources

Page 4-128 states, "The Navy has evaluated the effects of the impacts of Alternative 1 on historic properties in accordance with Section 106 of the NHPA and is proposing that potential adverse effects on the two archaeological sites (sites 36 Mg 0459 and 36 Mg 0460) that the Navy is treating as NRHP-eligible historic properties would be mitigated by covenants and deed restrictions with the property recipients. These covenants and deed restrictions would require property recipients to conduct evaluative testing of these two sites to determine their NRHP-eligibility. The FEIS should indicate where these two NRHP-eligible sites are located in relation to the Preferred Alternative.

Mobile Air Sources

Page 4-91 states, "Further analysis should be conducted by the developer once final roadway design is complete and prior to road construction to assess air quality impacts at specific intersections." It is assumed that the Navy will make this suggestion in the property transfer documentation. Please confirm.

Transportation

The project is likely to have significant and unavoidable transportation impacts at the intersections studied within the project area. Due to the delays and anticipated level of service (LOS), almost all of the intersections studied will require mitigative measures. It is not clear that the potential impacts of these mitigative measures were analyzed in the EIS. EPA is concerned that there may be additional adverse impacts that were not analyzed or documented. Also of concern is the limited number of intersections studied in the transportation analysis, and the concern that there are likely additional intersections that will be adversely affected by the proposed alternatives. Specific comments are as follows:

- Page 3-31- It would be helpful to provide a map showing where the Congestion Management Process Corridors overlap with the study area.
- Although the proposed roadways within the base are not fully designed and characteristics are uncertain at this time, it would be helpful to add some discussion of projected internal roadway functions and intended LOS. During final design, consider modifications that will improve internal roadway and additional access points, to alleviate congestion, wait times and improve LOS.
- Despite many of the studied intersections in the No Action Alternative already being projected to operate at LOS F, the increases in number seconds delayed for the Preferred Alternative over the No Action Alternative is significant, many delay times being increased by greater than 2-3 times, and as many as 5 times greater than the No Action Alternative delay times. Page 4-50 makes the assertion that most of the increase in traffic volume seen in Alternative 1 is due to background projected growth. EPA would disagree with this assertion, as it does not seem to support the provided data and conflicts with the statement made on Page 4-65 which asserts that each build alternative would result in significant and unavoidable impacts, but the degree of impact would be greater in Alternatives 1 and 2 than in Alternative 3. EPA would agree that the build

alternatives, especially the Preferred Alternative, Alternative 1, could result in significant transportation impacts.

- Potential mitigative measures for Alternative 1 are discussed on Page 4-53. Due to the extent of projected transportation impacts associated with the build alternatives, it would be prudent to include additional detail about these measures in the FEIS. Please clarify if these same measures are proposed for each of the build alternatives, and explain the potential for mitigative or corrective measures to be conducted to address the No Action condition. The EIS states that mitigative measures would be required by PennDOT. Please clarify if the implementation timing of proposed measures will coincide with the redevelopment activities or will be implemented at some later time. EPA also suggests that any draft figures of mitigative intersection and lane configurations be included. Also clarify which party may ultimately be responsible for constructing these mitigative measures, for example PennDOT, a private developer, or the HLRA. Since it appears that these mitigation measures are a required aspect of the project, the potential environmental and socioeconomic impacts should also be analyzed either in the FEIS or in a separate document. Since lane additions and roadway widening has the potential to require additional Right of Way, to impact private properties and businesses, and to impact wetlands or streams through culvert extension, relocation, or permanent fill, it is recommended the potential impacts of mitigation measures be included in the environmental consequences section of the EIS. It is difficult to assess potential project impacts if not all project components are included in the analysis. Also, please clarify if the wetland and stream delineation report included areas that overlap with proposed mitigative measures, including within existing Right of Way or necessary areas outside of the Right of Way. The analysis of these measures is not currently included in the indirect and cumulative impact analysis included in the document. It is recommended that as the implementation of these measures are reasonably foreseeable actions, at a minimum, they should be included in the cumulative impact analysis.
- EPA questions whether additional intersections should be included in the analysis, as the intersections that were studied overwhelming showed that the potential for significant transportation impacts. It may be likely that there are other adjacent intersections that will also be affected by the proposed alternatives, which may also necessitate mitigative measures.
- A discussion of SEPTA public transportation in the study area was included in Chapter 3 of the EIS, however there was no discussion of potential impacts of the proposed alternatives on public transportation/SEPTA in Chapter 4. EPA suggests including some analysis of potential impacts to SEPTA routes/lines in the study area.
- A discussion of safety and study area crashes were included in Chapter 3 of the EIS, however Chapter 4 did not assess the potential impacts of the action alternatives on safety and crashes. We recommend that this information be addressed in the FEIS.
- Cumulative analysis of transportation did not include any detailed analysis or traffic projections. Based on the information provided, it is unclear if any of the action alternatives and associated mitigative measures in combination with any of the past, present or reasonably foreseeable projects would have adverse effects on transportation. It would be helpful to include whether any additional transportation mitigative measures are reasonably foreseeable with the projects listed in the table. This would allow the identification of areas or resources that could be impacted by multiple projects. Any such

area identified may highlight locations where there could be multiple impacts to the same resources, which could guide and inform project mitigation and become focus areas for avoidance and minimization of impacts.

- Coordination with PennDot is recommended.

Environmental Justice

In Section 4.2.1.5 Environmental Justice and Protection of Children: The second paragraph reads as follows, “Demographic and economic data for all census block groups that are adjacent to or wholly or partially within the former installation were compared with similar countywide demographic and economic data to determine whether the proposed action could have disproportionately high and adverse effects on minority or low-income populations or on children. When the percentage of the population that is either minority/low-income or under the age of 18 years within an affected area exceeds 50 percent or is “meaningfully greater” than the minority or low-income population percentage of the community of comparison, that population could potentially experience a disproportionately high and adverse effect.”

It should be noted that the CEQ citation reads as follows: “Section 1-1. IMPLEMENTATION. 1-101. Agency Responsibilities. To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Marianas Islands. Low-income population: Low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census’ Current Population Reports, Series P-60 on Income and Poverty. In identifying low-income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect. Minority: Individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. Minority population: Minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. In identifying minority communities, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a geographically dispersed/transient set of individuals (such as migrant workers or Native American), where either type of group experiences common conditions of environmental exposure or effect. The selection of the appropriate unit of geographic analysis may be a governing body’s jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as to not artificially dilute or inflate the affected minority population. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds.”

The guidance does not set a 50 percent benchmark for low income populations contrary to the statement made in Section 4.2.1.5. The CEQ language should be used. For minority populations, by definition an area under consideration with a minority population of 50% is a minority population, or when the minority population is not 50% it is a population where, “the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.” So there is a need to determine what meaningfully greater means. Is it simply when the minority population of the census tract exceeds the percent minority of the benchmark population? Is it some scientifically determined benchmark? What is it?

Table 3.2.1.5 shows a very large study area. Table 4.2-5 only lists a few census tracts in Montgomery and Bucks counties. Why?

As shown in Tables 4.2-5 and 4.2-6, and based on the threshold levels described above, the Navy has determined the following:

- Census Tract 200502, Block Group 4, in Montgomery County has a higher minority and Hispanic/Latino population than the community of comparison;
- Census Tract 200502 in Montgomery County as a whole has a higher percentage of people living in poverty than the community of comparison;
- Census Tract 200505, Block Group 3, and Census Tract 200506, Block Group 2, in Montgomery County have higher percentages of people aged less than 18 years than the community of comparison; and
- Census Tract 101808, Block Group 1, in Bucks County includes a larger minority population and Hispanic/Latino population than the community of comparison.

This information is incomplete. Census Tract 200502, Block Group 3 also exceeds the county benchmark for Hispanic populations.

Another quote from the same page is as follows: “However, there would not be a disproportionately high or adverse effect on these populations as the adverse effects (i.e., potential for increased traffic) would be spread throughout the community. In addition, the Redevelopment Plan was designed by the HLRA to provide economic benefit to the surrounding community, resulting in new jobs, additional housing units, and additional tax revenues for Horsham Township. Therefore, the overall impact of the redevelopment of the former installation property would promote positive economic development, which would benefit the entire township.” Upon what data are these claims based? There does not seem to be any supporting evidence presented.

There is concern that the assessment is not looking at Environmental Justice as a coherent and integral part of the overall assessment. The potential for impacts needs to be given careful consideration since there may be activities that occur in some parts of the study area, or there may be activities that impact certain portions of the study area differently.

Cumulative Impacts

As noted on page 4-22, "The proposed construction of 1,486 housing units would be expected to cause an influx of new residents to Horsham Township by increasing the number of available housing units in the township." In addition, "...the total population in Horsham Township would increase by an estimated 3,555 persons under Alternative 1." It was assessed in the DEIS that Alternative 1 would be expected to have a moderate impact on the population of Horsham Township since the increase would occur over a 20-year period. However, based on the Delaware Valley Regional Planning Commission (DVRPC), Horsham Township is anticipated to experience large growth over the next 20 years. "Between 2010 and 2030, total population in the township is expected to increase by approximately 17.1 percent, or by nearly 5,500 residents, to 30,614 residents (DVRPC 2012a)."

Page 4-23 states, "This increase in the supply of housing units in Horsham Township could have a slight impact on the price and availability of existing units as the additional units reduce demand for existing structures. However, given the extremely low homeowner vacancy rates and the low rental vacancy rates currently in the township and in the region as a whole, this impact would be expected to be minor."

When considering the cumulative increase in new housing proposed in the surrounding area [217 single-family homes, 88 duplexes (or 176 units), 82 townhomes] combined with the approximately 340 single-family homes, 350 townhomes and 400 condominiums or apartments proposed for Alternative 1, this a significant impact to the area. Has there been a study to determine the need for additional housing when developing the reuse plan?

Page 4-23 states, "Because the proposed redevelopment would occur over a 20-year period, this would result in an annual change of only 75 new housing units a year, resulting in a negligible annual impact on the township's housing market." Has there been consideration given to the average age of the population within existing homes and the impact that it may have on the vacancy rate over the 20-year period? Is there a public awareness of the proposed redevelopment plan and the impacts that it may have on existing communities? The cumulative impact on existing residences and resale value should be evaluated. The cumulative impact of increased housing and potential growth in the area should be considered in the transportation evaluation.

In addition to housing, commercial/retail establishments are proposed. What is the vacancy rate of existing commercial/retail establishments? Is there a need for more commercial/retail space? Has a study been conducted to determine need and use for additional commercial/retail space when developing the reuse plan?

As noted on page 5-12, "Assuming full build-out potential would be met and that the property would be used by business enterprises new to the region, an estimated 7,577 new permanent jobs would be generated under Alternative 1." Page 5-13 states that approximately 3,555 persons would reside in the newly constructed homes that would be built under Alternative 1. Page 5-13 states, "Cumulatively, implementation of Alternative 1 and proposed projects from

Section 5.3 (Recently Completed or Reasonably Foreseeable Actions) would increase the local population by an estimated 4,163 residents.

These are significant increases to the area in addition to potential growth expected. The cumulative impacts analysis did not fully discuss these potential impacts on residences and resale value of existing homes as well as on roads and transportation.